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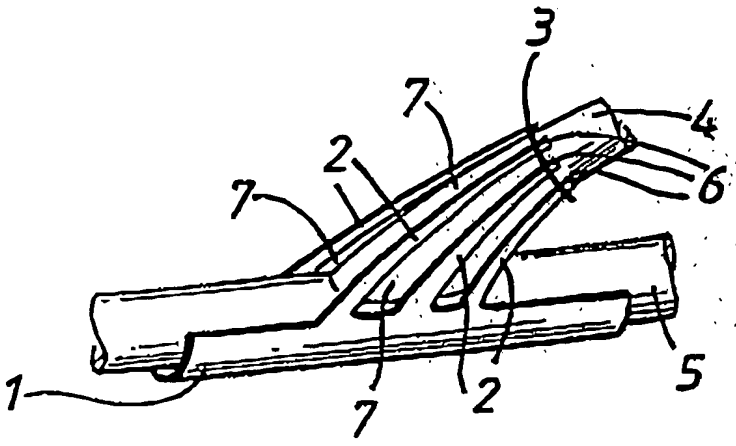
(54) Title: STENTS FOR BLOOD VESSELS

(57) Abstract

A stent for supporting part of a blood vessel which stent includes a supporting portion around which or within which part of an intact blood vessel other than a graft can be placed so that the stent internally or externally supports that part and the supporting portion of the stent is of a shape and/or orientation whereby flow within the vessel is caused to follow a non–planar curve. By maintaining non–planar curvature in the vessel itself, favourable blood flow velocity patterns can be achieved through generation therein of "swirl" flow. Failures in such vessels through diseases such as thrombosis, atherosclerosis, intimal hyperplasia or through blockage, kinking or collaps, can be significantly reduced.



--ABSTRACT OF THE DISCLOSURE

A stent for supporting part of a blood vessel includes a supporting portion around which or within which part of an intact blood vessel, other than a graft, can be placed so that the stent internally or externally supports that part of the blood vessel. The supporting portion of the stent is of a shape and/or orientation whereby flow within the vessel is caused to follow a non-planar curve. By maintaining a non-planar curvature in the vessel itself, favorable blood flow velocity patterns can be achieved through the generation in the vessel of a swirl flow. Failures in such vessels through diseases such as thrombosis, atherosclerosis, intimal hyperplasia or through blockage, kinking or collapse, can be significantly reduced.--.